

ABSTRACT

A method of manufacturing an actuator device configured to prevent separation of a vibration plate and to enhance durability and reliability, and a liquid-jet apparatus are provided. The method includes the steps of forming a vibration plate on one surface of a substrate, and forming a piezoelectric element having a lower electrode, a piezoelectric layer, and an upper electrode on the vibration plate. The step of forming a vibration plate at least includes an insulation film forming step of forming an insulation film made of zirconium oxide by forming a zirconium layer on the one surface side of the substrate in accordance with a sputtering method and subjecting the zirconium layer to thermal oxidation by inserting the substrate formed with the zirconium layer to a thermal oxidation furnace heated to a temperature greater than or equal to 700°C at a speed greater than or equal to 200 mm/min.